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(71) Applicant *(for all designated States except US)*: **CPM S.A.** [BR/BR]; Alameda Araguaia, 1930, Alphaville, 06455-000 Barueri - SP (BR).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **PFLUG, André Meyer** [BR/BR]; Rua Pensilvânia, 888 - apt. 101, Brooklin, 04564-002 São Paulo - SP (BR). **DI CUNTO, Vicente Berardi** [BR/BR]; Rua Dr. Virgílio de Carvalho Pinto, 577 Pinheiros, 05415-030 São Paulo - SP (BR).

(74) Agents: **ARNAUD, Antonio M.P.** et al.; Rua José Bonifácio, 93 - 9th floor, 01003-901 São Paulo - SP (BR).

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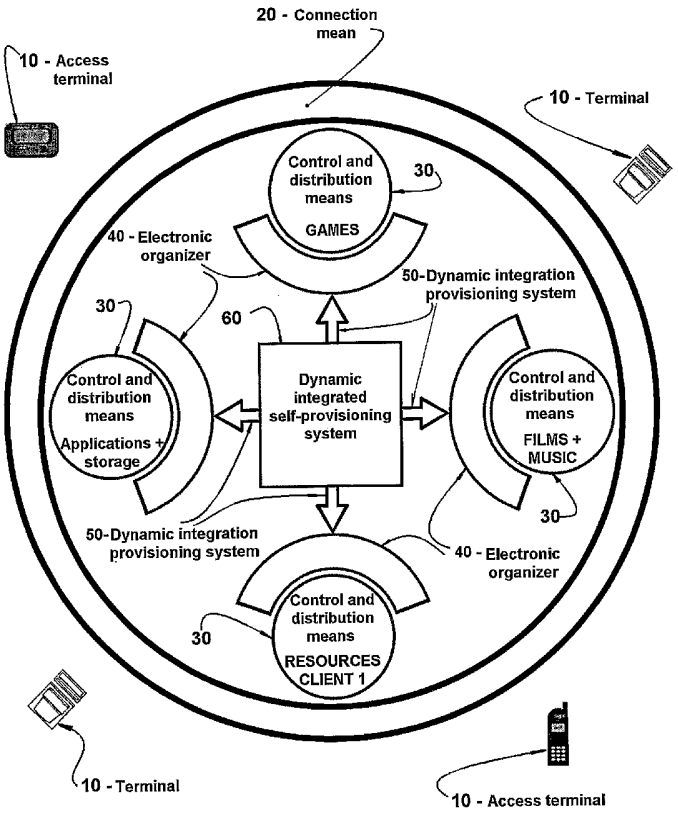

(57) Abstract: Electronic computing system - on demand and method for dynamic access to digital resources, said system comprising means of hardware, software, data storage and management, measurement and control of information flow, in order to make available, on demand and in a centralized way, to different users individually registered into the system and previously authorized in their respective access levels, to resources of electronic processing, data acquisition, data storage, data transmission and/or distribution, information, communication and entertainment. The system also comprises: resource control and distribution means (30), operatively connectable to access terminals (10) for identifying signals received from each authorized user, terms of payment agreed and also the resources to be made available to users according to instructions received from access terminals (10) and dynamic integrated self-provisioning means (60), connected to electronic organization means (40), upon insertion and alteration of user identification and of his/her contract.

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"ELECTRONIC COMPUTING SYSTEM - ON DEMAND AND METHOD FOR DYNAMIC ACCESS TO DIGITAL RESOURCES"

Invention action field

The present invention refers to an electronic computing system comprising resources such as hardware, software, data storage and management, data flow measurement and control, designed to make available, on demand and in a centralized way, resources of electronic data processing and purchasing, storage, data transmission or distribution, information, applications, entertainment and communication tools, to different selected users, previously authorized within their respective profile.

Previously Used Technique

The "on-demand" electronic computing systems currently used are those which allow access, by duly authorized individual or corporate users in one or more servers, to different data processing resources, applications, data storage, information, entertainment and communication.

The current "on-demand" electronic computing systems, provide a static set of resources which are purchased (software, hardware and communication), and used by users, independent of the level of usage, the resources are made available to users are therefore contracted beforehand, according to the operating requirements pertaining to each user, where costs are based on contracted resource levels and which remain available to users (resource level, in this case, refers to software, processing, storage or utilization time). In spite of providing the advantage of reducing the cost of ownership related to hardware and software technologies and facilitating and a cheaper access to such technologies, the electronic computing systems currently in use do not operate in a real "on demand"

way. In the currently used solutions, users contract a fixed number of resources and pay for the rental of such, independent of the utilization level.

Thus, one of the deficiencies found in such currently used electronic computing systems, so-called "on demand", is the fact that these are not systems that operate on the effective utilization of the user, since billing is accomplished considering the levels of the contracted resources and not the real utilization of the resource. In these systems, it is usual that the advantage of eliminating costs related to acquisition of hardware and software technologies is minimized or made null by the utilization of the contracted resources.

The electronic computing systems currently used and so-called "on demand", actually can only make available resources to an individual or corporate user, thus enabling him/her to process and store data introduced into the system and to be forwarded to data storage or to other electronic computing systems which utilization is made available by means of specific charged or cost-free contracting.

In the current "on demand" system the individual or corporate user pays for the resources available whether they are being used or not. In other words, independent of usage the resources are contracted. In the case of the user utilizing resources from other service providers, or resources the same model applies, i.e. you pay for the contracted resources independent of usage.

In other words, in the so-called "on demand" electronic computing systems currently in use, the controlled resources only enable users to connect themselves electronically to other service provider systems and diverse contents, such as electronic

communication systems, data providers, information, entertainment and communications, which utilization can only be made under another contract or specific authorization.

Therefore, It is not possible, through the systems so far proposed, to have available for a user, in a centralized way and from a single authorization and billing point, resources comprising electronic data processing, information and communication systems, its acquisition, storage, distribution, or data, information and entertainment transmission.

Another aspect of the currently so-called "on demand" electronic computing systems refers to the access terminals that allow users to access the enabled resources. Even though the data processing system itself offers a certain flexibility in terms of access terminals available to its structure, users may need to use an access terminal specifically required to access certain resources other than those related to the software, hardware and electronic storage previously contracted

In view of the above mentioned limiting aspects and bearing in mind other operational deficiencies, the so-called "on demand" electronic computing systems currently used define technologies, versions, proprietary systems and other means to which users are obliged to adapt themselves in order to have access to technologies available, or made available to them, thus being charged the costs related to the contracting of such technologies and not by the effective use of these technologies.

Another characteristic, inherent to currently used computing systems is that each person may bear multiple profiles. These profiles represent resources and information to which each user has personal access

rights, as a domestic user or as an agent of a legal entity (employee, collaborator, partner or participant in different legal entities). The integration of these profiles does not occur, since users, upon accessing their resources from a certain legal entity, are restricted to the environment made available to them by this legal entity, and thus it is not possible to integrate this legal entity profile to their personal profiles.

Invention Objectives

The present invention has the purpose of providing an electronic computing system to be selectively accessed by authorized users, in order to make available to these users the most current versions of resources compatible with their authorized level, which will be billed, in a pre paid or post paid way, according to the type of resource required by the user and to the time and/or amount/level of the resource effectively being utilized.

Another objective of this invention is to provide an electronic computing system as defined above, thus making available, for authorized users and in a centralized way, various resources coming from one or more proprietary providers or belonging to the electronic computing system itself, or to other corporate or individual users, with such resources comprising not only hardware, software, data and information storage, as well as management, measurement and control of the flow of the data related to acquisition, distribution or transmission of data, applications, information, entertainment and communication.

It is the objective of such invention to provide an electronic computing system, as mentioned above, that can be operatively accessed by authorized users by any

means of connection utilized for data transmission in the form of digital signals, and through any access terminal.

Another objective of this invention is the centralized management of multiple user profiles, thus enabling each user to visualize all resources he/she can access (either the resources belonging to his/her personal profile or those made available to him/her by a legal entity) independent of the connection means used.

Summarized description of Invention

Incompliance with above mentioned objectives, the device in question provides an on demand electronic computing system, to be selectively accessed by different users, authorized in their respective access levels, to resources available in the system, which comprises the following:

- An access terminal that can be accessed by any user and built in order to relay digital signals representing the identification of user's operating instructions and to receive digital signals representing information and data processed by the system or retrieved from a given electronically accessible database.

- Means of control and distribution of resources operatively connectable to the access terminals and built in order to identify signals received from each authorized user, terms of payment and also the resources to be made available according to the instructions received from authorized user's access terminal; such means of control and distribution of resources comprise electronic processing resources, data acquisition, data storage, data and information distribution, communications and entertainment;

- Means of connection to operatively connect each access terminal to the means of control and

distribution of resources, in order to enable electronic data transmission among them;

- The means of electronic organization, operatively coupled to their respective means of resource control and distribution and built so as to receive from the resource control system the identification, authorization level and service required (profile) by the user from any access terminal thus selecting and instructing the operation of means of control and distribution of resources necessary for accomplishment of the required service, with such electronic organizers limiting the availability of means of resource control and distribution to the level of each respective user, thus being able to record levels and utilization times;

- Integrated and dynamic self-provisioning means, operatively connected to the electronic organizing means upon insertion and alteration of user identification or of his/her contract, thus allowing visualization, management and access flexibility to different user profiles and authorized resources, enabling user control for self-provisioning and yet, to visualize system's effective utilization accounting for billing purposes.

The system, as generically defined above, allows individual or legal entity users, duly authorized, to access in a centralized way and through different means of data transmission, starting from simply built, low-cost access devices, a variable plurality of data processing and data storage and entertainment resources, with users being billed only for the resources effectively utilized and the time spent during such utilization.

Brief description of design

The invention will be described as follows, making

reference to herewith attached drawings which are hereby shown as examples of a possible accomplishment of such invention and where:

Figure 1 represents a basic diagram of elements constituting the computing system in question and,

Figure 2 represents a schematic diagram showing user association with the computing system focused by the invention.

Fig. 3 is a flow chart describing the program that controls the operation of the invention.

Detailed description of invention

As illustrated in Figure 1, the electronic computing system in question is structured in order to enable different users the access to different resource sources by means of a centralized electronic processing structure.

In accordance with the proposed solution, which makes available to users application and processing resources, system utilization by authorized users does not require use of intelligent access terminals of complex design and which are relatively expensive. According to such invention, each user only requires an access terminal (10) having capacity to display, in an interface screen to the user, the digital signals inserted by any type of interface plus those received from resource sources. The signals circulating between each access terminal (10) and other means constituting the system are only representations of information relayed from the means of control and distribution and signals identifying the commands made by users.

This solution allows access terminals (10) to be built with little built-in intelligence (which technically means little processing ability), since there is no need to store files, data, profiles or any other information into the terminal.

Access terminals (10) can be associated with any individual user, duly authorized to access a determined level of contracted resources into the system, or with users belonging to a corporation or institution having contracted the electronic computing system in question. In the latter case, each corporate user will have his/her own individual authorization to enter the system, being such authorization limited to the level of the contracted resource.

In spite of the fact that the electronic computing system in question allows a radical simplification of the application and processing means required by the access terminal (10), it must be understood here that the active (intelligent) terminals already made available by individual or corporate users can as well be employed. Thus, in cases where users already have available terminals capable of executing basic operations with screen signals, these terminals can be easily utilized, for example, as access terminals (10) for the resources provided by the electronic computing system in question.

Even in cases where the access terminal (10) is defined as a personal computer, or even as a cellular equipment, the loss or even theft of such hardware means, will not have further implications regarding contents of work in progress or work already accomplished, since the referred terminal will not contain stored files, profiles or any information whatsoever. The resources do not depend on the constituting structure or on the operation of a specific access terminal (10). As better described further in this report, the user has a specific access password, which can be utilized from any other access terminal (10) presenting minimum and necessary means for connection to the system in question. Therefore,

it becomes now possible for users to have a more flexible utilization of the technology made available, following an innovative concept regarding the independence of the proprietary access terminal that will be required for effective access to the referred technology and to resources made available by this same technology.

At the moment of the association of the user with the solution, his/her personal profile will be recorded into a dynamic integrated self-provisioning mean (60), whereby his/her personal characteristics, such as name, address, ID, Social Security Number, among others, will be stored.

It is important to emphasize here the single and centralized characteristic of this dynamic integrated self-provisioning mean (60), since after association of the user with the system, it is in this very self-provisioning system that all processing of resources, applications, information, entertainment and data storage for each user will be contracted. Besides, in case of an eventual insertion of a new profile linked to same user, originated from a new contract different from the already existing one, this new profile will also be integrated to this same user, thus allowing its centralized resource management, utilization and visualization.

Starting from this new contract, the dynamic self-provisioning system (60) will be integrated, through a dynamic provisioning integration system (50), to electronic organizing system (40), relaying to the specific means of control and distribution (30) the resources users have utilization rights granted, thus making possible startup of effective utilization of resources made available and their billing per effective use.

The connection between the dynamic integrated self-provisioning system (60) and the electronic organizing system (40) only becomes possible due to the sole and exclusive integration of these systems. This integration is achieved by a dynamic integration self-provisioning system(50).

From the very moment integration takes place, users will be able to start-up utilization of the system.

According to the invention, the access terminals (10) are operatively associated through connection mean (20), with resource control and distribution means (30) built in order to identify signals received from each authorized user, terms of payment contracted, plus the resources to be made available by the system, related to the instructions received from the authorized user's access terminal (10).

The electronic computing system in question can make use of different means of connection (20), like those via cable (dedicated connection), wireless, power line or any other known means or means to be developed and that may allow the safe conveyance of digital signals, representing information and data exchanged between each access terminal (10) and the means of resource control and distribution (30).

According to the proposed system, users' profile is a single, unique (one), independent of the connection means (20) utilized by the user to operatively connect himself/herself to the system and also from the location where the connection is being requested.

All applications, personal files, desktop icons or similar items, as well as wallpaper and favorite items already stored in each user's Internet navigator, will be promptly made available starting from the resource providing system. The system is structured to guarantee to users a modality that will only depend on

the existence of an access terminal (10) and on a means of connection (20) recognizable by the system of resource control and distribution (30).

The resource control and distribution means are operatively associated with electronic processing resources, data acquisition, data and information storage, data and information distribution, communications and entertainment and such resource control and distribution means (30) can be the property of the system administrator or outsourced from third parties.

With the basic structuring as defined above and schematically represented in Figure 1, users, in order to connect themselves, must send to the system, through an access terminal (10), their individual identification and respective password. The identification can be defined, for example, by a word typed on the access terminal (10) keyboard or through the digital information extracted from a magnetic smart card and password can be composed of a series of letters, symbols and numbers also typed via keyboard or even through finger print identification (biometric password).

Identification and password are sent through the connection means (20) utilized by the user, to the control and distribution means (30), where users are registered. Both identification and password are checked so that user's access to system is granted.

The resources required by the authorized user are matched with the contracted authorization level so that the related resources are then made available and accessed through the electronic organizing means (40) which are operatively associated with the electronic processing resources such as data acquisition, data and information storage, data and information

distribution, communications and entertainment that might be requested and to which user is authorized by contract.

Thus, the user can now start his/her exclusive access to the required resources granted to him/her in the operation requested to the electronic computing system, with all resources being effectively utilized and their form of utilization (form defined as per criteria established by the contracting party, such as time, quantity or activation) accounted by the resource control and distribution means (30), for definition of the cost of the operation to be re-passed to user in accordance with the contracted utilization system.

The above described solution allows operational versatility, since the different and variable resources made available for each user, individually, have their access and utilization managed in a centralized way, thus leading to the following advantages:

- Centralized security: besides the individualized access security items made available, users have now their data stored in a safe and redundant way, thus avoiding losses;
- Centralized management and maintenance, so that resources are managed in a centralized way and that payment is accomplished according to the effective utilization of the resources;
- Availability of resources: client has now available for him/her the necessary resources in a simpler way, without the limitations of the local equipment. The performance of the electronic processing operations, the data storage area, the access to information and to communication tools and entertainment remain at user's total disposal, for contracting and immediate

utilization.

It must be understood here that the resources to be made available to users can be outsourced and partially or totally proprietary. These last two situations may occur in case of corporations with a great number of access terminals (10) from which users access resource providers that may, totally or only partially, belong to the corporation or institution itself.

System's main characteristic is the singularity of user's profile. From the moment of the creation of a user, as detailed further in this report, this user will then become a part of the system, as a single entity.

This user can access various profiles during his/her time of association with the system, either as an individual utilizing resources for his/her own benefit or linked to one or to various legal entities that are making available for him/her processing resources, information, communication and entertainment for the accomplishment of functions he/she has the right (or obligation) to use.

The main characteristic noted, in this case, is the possibility of user having access to all of these resources, through a single and centralized interface. This is only made possible thanks to the proposed architecture, through which the dynamic self-provisioning system (60) is a single and centralized one, commanding, as described below, the availability of multiple resources through multiple resource providers, comprised by the specific means of control and distribution of resources (30).

As schematically illustrated in Figure 2, attached, at the moment of the association or insertion of a user into the system, his/her sole profile will be inserted

in the dynamic integrated self-provisioning system (60), storing in one single database (61) operatively associated with the dynamic integrated self-provisioning system (60) the personal characteristics of each individual user such as name, address, Social Security Number, among others. It is important to stress here the unique and centralizing characteristic of the dynamic integrated self-provisioning system (60), since after the association of user with the system, all resources related to processing, applications, information, communications, entertainment and data storage for each user are contracted and dynamically modified using this dynamic integrated self-provisioning mean, according to the momentary needs of such user.

Starting from the contracting of services, the dynamic integrated self-provisioning system will be integrated through the dynamic integration provisioning system (50) and through one or more electronic organizers (40) duly integrated into the system and that can be situated in different locations, relaying, through a dynamic resource allocation tool and to the respective resource directories (80) the necessary command so that all resource users have utilization rights made available, thus making possible startup and utilization of such resources and consequent billing by their effective utilization.

This connection between the dynamic integrated self-provisioning system (60) and the electronic organizers (40) can be made possible only due to the unique and exclusive integration of these elements. This integration is defined by the dynamic integration provisioning system (50) (Figure 1).

From the moment integration effectively took place, user then becomes able to start system utilization.

Fig. 3 is a flow chart describing the program that controls the operation of the invention. S101 is the start for entering the system. The program asks in S103 if the user is an administrator, for example, a person at a corporation who is to be responsible for a number of users or a single user customer. If there is an affirmative answer, the program proceeds to S105 in which a contract is created or updated. Source information for contract is provided from an access point S107 in which information such as the type of resources available, billing rates for the various resources, available types of billing, such as deferred or immediate, etc. The administrator makes the necessary selections for the type of contract desired. In S109 the administrator enters one or more user profiles. The profile is unique to each user who is to use the system and contains information such as the user name, password and access level to the various resources available under the contract. For example, a customer can contract for use of a given number of the available resources and users of that customer can be limited to only certain one or more of the contracted resources. The administrator entry operation is concluded in S111.

In S121 the contract terms and user profiles for the customer are assembled. S125 (or 60 in Fig.1 and Fig. 2) is the entry and output point for the contract and user profile information of the various customers stored in the database 61 (in Fig. 2) previously described. Input (write) and output (read) accessibility to the database 61 is in S127. When an administrator is not entering data, as determined in S103, the program at S140 makes system access available to a user.

At S141 a user logs in to the system via a terminal 10

(in Fig. 1), previously described, by supplying at S143 the appropriate identification, such as a user name and password. The terminal 10 can be of the passive type except for having the capability to permit entry of the log-in information. In S145 the log-in information is authenticated and access to the resources determined against data provided from the LDAP Directory S130 (or 40 in Fig.1 and Fig. 2). The database information is sent from the database 61 to the LDAP Directory through S129 to S130 so that the authentication can be carried out in S145. If the log-in information is not authenticated, S147 makes the log-in procedure of S143 and S145 available to be repeated. The system can be set to deny access after a predetermined number of log-in authentication failures.

Upon the log-in authentication being accepted in S147 the designated resource access for the user is made available in S151 via the dynamic resource allocation means 70 (in Fig. 2) previously described. In S153 the user makes use of such resources as needed and desired. As explained above, the resources can be any one of application programs, data sources, operating systems, etc. Allotted time and frequency of use of a given resource by a user can be set in contract and/or the user unique profiles.

The system provides the capability for a user to store the results of his use of resources. One suitable storage arrangement shown is that in S155 the user connects to a file server which in S161 stores the data in a suitable file. The storage file preferably is monitored in S162 by an anti-virus program. As the data is being stored, in S163 the amount of usage of the resource is being computed and the usage data is acquired in S165 and billing is carried out against

the customer account in the database 61 via the S125 and S127. If in S155 it is determined that there is to be no storage of the data from use of the resource, then usage is directly computed in S157 and billing against the contract carried out in S165, S125 and S127. Use of the system terminates at S111 upon billing being completed.

System inherent functionalities

Some functionalities occur in the solution, independent of any contracting party or contract customization. These functionalities are integrating parts of the standard services and made available by the system. They are as follows:

Initial access to account made through password provided by the contract administrator. With the purpose of implementing greater security to the information administrated by the system, the passwords are standardized and automatically initialized and can be modified by user from his/her first access. The password standard demands the minimum of 8 characters. A safer access control device, like, for example, a digital print reader or personal identification device installed in the hardware, can replace the password.

After the first access, user is then requested to change his/her password. This password change is made in a system layer composed of a directory service, i.e., internal information structure organizers. This change in password is necessary for the configuration of the password administrator, a resource that allows user to enter his/her username and password only one time into the system and so that all applications to which he/she has user rights have their accesses opened for him/her upon such single authentication.

Password locking. If user makes a mistake upon entering his/her access password for three consecutive

times, his/her access to the system will be locked.

Access via replication session of information from resource control and distribution means (30). In order to provide a faster access to the solution, users must configure a client application in their equipment. This simple configuration can be done through an installation media provided by the system administrator or via Internet. It is understood as access via replication session of information from resource control and distribution means (30) into system the execution of the following steps:

User establishes a safe encrypted connection of the client to the resource control and distribution means (30).

User authenticates himself/herself into solution, through the information replication session.

User manages to return to the exact point at the moment access to system is interrupted, in case of loss of connection, sudden drops in the electric power or by voluntary disconnecting. Users can have one single information replication session of the resource control and distribution means, at each time.

File repository via Internet. Users can only make this access within the replication session of information from resource control and distribution means (30) and through the data synchronizing application.

Safe encrypted connection. Ensures security to accesses and can be established in two ways, as follows:

Via Internet

Via dedicated link

Accesses to data synchronizing application via Internet. These are possible within the LAN (Local Area Network) without need of new user authentication and via Internet, without need of access via

replication session of information from resource control and distribution means (30), but with new user authentication.

Printers View. It is possible only via replication session of information from resource control and distribution means (30), with implementation made through the dynamic printer access application.

Printer compatibility and configuration applications (drivers). It is possible to have them downloaded by user via safe encrypted access or through replication session of information from resource control and distribution means (30), made through the dynamic printer cleanup application.

Functionalities Perceptible to the User.

System users have the perception of the following functionalities in the services he/she will utilize:

My documents. User has access to a storage space for personal files called "My Documents".

Customizing My Documents. Users have no access to a "My Documents" that belongs to other users.

User Groups. User has access to a storage space shared with the user group he/she belongs to.

Customizing User Groups. User has no access to a shared directory that belongs to other user groups to which he/she does not belong.

Applications. User has access to applications that had been contracted and configured under the terms of the contract of which he/she is an integral part.

Customizing Applications. User has no access to specific applications available in the solution within the contract user is an integral part (a contract can be established with an individual or a legal entity).

Contracted Applications. User opens applications under a contract and belonging to a group of which he/she is an integral part (a contract can be established with

an individual or legal entity).

Operating system command screen. User has no access to the operating system command screen.

COPY and PASTE functions in already existing intelligent or mixed access terminals. User can access system through terminals that also have local processing, applications and data storage. The user can use COPY and PASTE tools to copy from system, i.e., from files and applications he/she accesses in the centralized system, for local storage or vice-versa.

Personal Data. User can alter his/her personal data such as address, telephone number, etc., initially configured in the solution by the resource administrator or imported when migration to system took place.

Personal Password. User can change his/her personal access password to the solution.

E-mail System. User has complete access to e-mail system configurations without restrictions and can alter them, though they are initially configured in accordance with user profile stated in the contract (a contract can be established with an individual or legal entity).

Language. User can change language of the operating system and of those applications that support this functionality.

Storage Quotas. User has quota limits for the corporate directory (shared by the group he/she belongs to) and for the personal one, according to the definition stated in the contract of which he/she is a party (a contract can be established with an individual or legal entity).

Electronic mailbox. User has a quota for his/her electronic mailbox as defined in the contract of which

he/she is a party.

Remote access to file repository via local network. User can access the file repository if he/she is in the company's internal network (local network), by accessing the replication session of information from resource control and distribution means (30).

Remote access to data synchronizing application via Internet or local network. User can access the data synchronizing application and consequently the data contained in the repository via an external network, if he/she has installed in his/her access device an encrypted safe connection application layer, or, directly, via local network.

Single Sign On (single input with access control). If a user belongs to a contract whereby single sign on is enabled, he/she only needs to access in a safe way each application once, to enable this functionality provided he/she had previously established a safe encrypted connection. In case the encrypted safe connection had not been established, he/she will have to be authenticated with the password again.

Mappings of storage space in access terminals. The user who is effecting accesses through mixed access terminals can map local storage units and their network storage units when he/she is using the system.

Internet Home Page. When user connects himself/herself to the Internet, the standard initial homepage accessed is the system's portal. However, user can as well define another page as a default homepage in the standard contract.

Customer Service. Users have the right to access a customer service call center for the system and to support available functionalities into the system and as stated in the contract he/she is a party (a contract can be established with an individual or

legal entity).

Custom Service Calls. Users can visualize status and progress of their open calls.

Functionalities perceptible to the Contract Administrator. Upon contracting, the system will be configured and the applications and resources will be made available according to the provisioning made by the client, who will name a solution resources administrator (any person defined by the client in case of contract established with legal entity and any person defined by client or himself in case of contract established with individuals). This administrator will be responsible for configuration and allocation of resources within the solution according to the provisions stated in the access contract.

User Profile. The contract administrator is the person responsible for creating contracted configurations, specify user groups and thus ensure that resources are available according to defined and contracted rules.

User Profile Modifications. The contract administrator can modify the resources designated to the user or group profiles, according to defined and contracted rules. The modifications may comprise resources related to applications, file storage space, message storage space and/or printing resources.

Directory Quotas. The contract administrator may define and/or change corporate directory quotas and persons (users) stated in his/her contract.

Printers. The administrator can define available printers for his/her contract in order to have them designated to user profiles or user groups according to the desired allocation.

Having described the system, it will now have its innovative concept defined as per the claims that are

also attached to this report.

CLAIMS

1. An on-demand computer system for making resources available to a plurality of users on a dynamic basis, comprising:

a plurality of resources (30);

a plurality of terminals (10) remote from said resources, each said terminal to be operated by a user;

a dynamic integrated self-provisioning information means (60) accessible from a terminal (10) and including a database (61) of information that includes a unique profile for each of a plurality of users of identity information, access level to one or more of said plurality of resources, and contract information on charges for use of said resources;

an electronic organizer (40) connected to said dynamic integrated self-provisioning information means (60) that is actuated by a user accessing the system supplying proper identity information from a said terminal (10); and

a dynamic resource allocation means (70) operated by said electronic organizer (40) upon actuation to allocate the one or more resources for use corresponding to the access level of the accessing user upon the accessing user properly actuating said electronic organizer.

2. The on-demand computer system as claimed in claim 1 and further comprising:

a resource directory (80) from which availability of a resource of said plurality of resources is selected for use by an accessing user that supplied proper identity information.

3. The on-demand computer system as claimed in claim 1 and further comprising:

means (60) for charging the accessing user for use of

a resource.

4. The on-demand computer system as claimed in claim 3 wherein said means for charging the accessing user is included in said dynamic integrated self-provisioning information means (60).

5. The on-demand computer system as claimed in claim 3 wherein said means for charging the accessing user operates in response to said contract information.

6. The on-demand computer system as claimed in claim 5 wherein said contract information includes charging information for one of charging amounts against a pre-paid account, a running current account balance, and charges to be paid at a later date.

7. The on-demand computer system as claimed in claim 1 and further comprising a display at a said terminal for displaying data of communication with said dynamic integrated self-provisioning information means (60).

8. The on-demand computer system as claimed in claim 1 wherein said plurality of resources comprise at least one of application programs and services.

9. The on-demand computer system as claimed in claim 8 wherein said plurality of resources further comprises games and data.

10. The on-demand computer system as claimed in claim 1 wherein all of said plurality of resources are present on the same database.

11. The on-demand computer system as claimed in claim 1 wherein at least some of said plurality of resources are at different locations, and further comprising:

a communication system controlled by said dynamic integrated self-provisioning information means (60) for providing communication between each said terminal of said plurality of terminals and the resources of said plurality of resources permitted by the access level of the user of each said terminal.

12. The on-demand computer system as claimed in claim 1 wherein said database of said dynamic integrated self-provisioning information means (60) accessible from a terminal (10) by at least one of a user and an administrator to change information in the profile of a user.

13. The on-demand computer system as claimed in claim 1 further comprising a dynamic integration provisioning means (50) that connects said electronic organizer (40) to said dynamic integrated self-provisioning information means (60).

14. The on-demand computer system as claimed in claim 1 and further comprising:

a resource directory (80); and

a resource allocation means (70) operating in response to said electronic organizer (40) to provide information from said resource directory to make available to an accessing user the one or more resources of said plurality of resources as permitted by the access level of the accessing user profile.

15. A method of providing dynamic access to a plurality of digital resources, comprising the steps of:

providing the plurality of resources (30);

providing a plurality of terminals (10) each remote from said plurality of resources, with each said terminal to be operated by a user;

establishing a database (61) of information that includes a unique profile for each of a plurality of users of identity information, access level to one or more of said plurality of resources and contract information on charges for use of said resources;

accessing said database from a said terminal (10) through a dynamic integrated self-provisioning information means (60) by an accessing user supplying

proper identity information from a said terminal (10) to an electronic organizer (40); and

allocating the one or more resources for use by a user corresponding to the access level of the accessing user.

16. The method as claimed in claim 15 and further comprising the step of charging the accessing user for use of a resource in accordance with said contract information on charges for use.

17. The method as claimed in claim 15 wherein the step of providing said plurality of resources comprises providing various resources at different locations and further comprising the step of:

providing communication between each said terminal of said plurality of terminals and the resources of said plurality of resources permitted by the access level of the user of each said terminal.

18. The method as claimed in claim 17 wherein the step of providing said plurality of resources comprises providing resources of at least application programs and services.

19. The method as claimed in claim 15 further comprising the step of setting the profile of a user by at least one of a said user and an administrator.

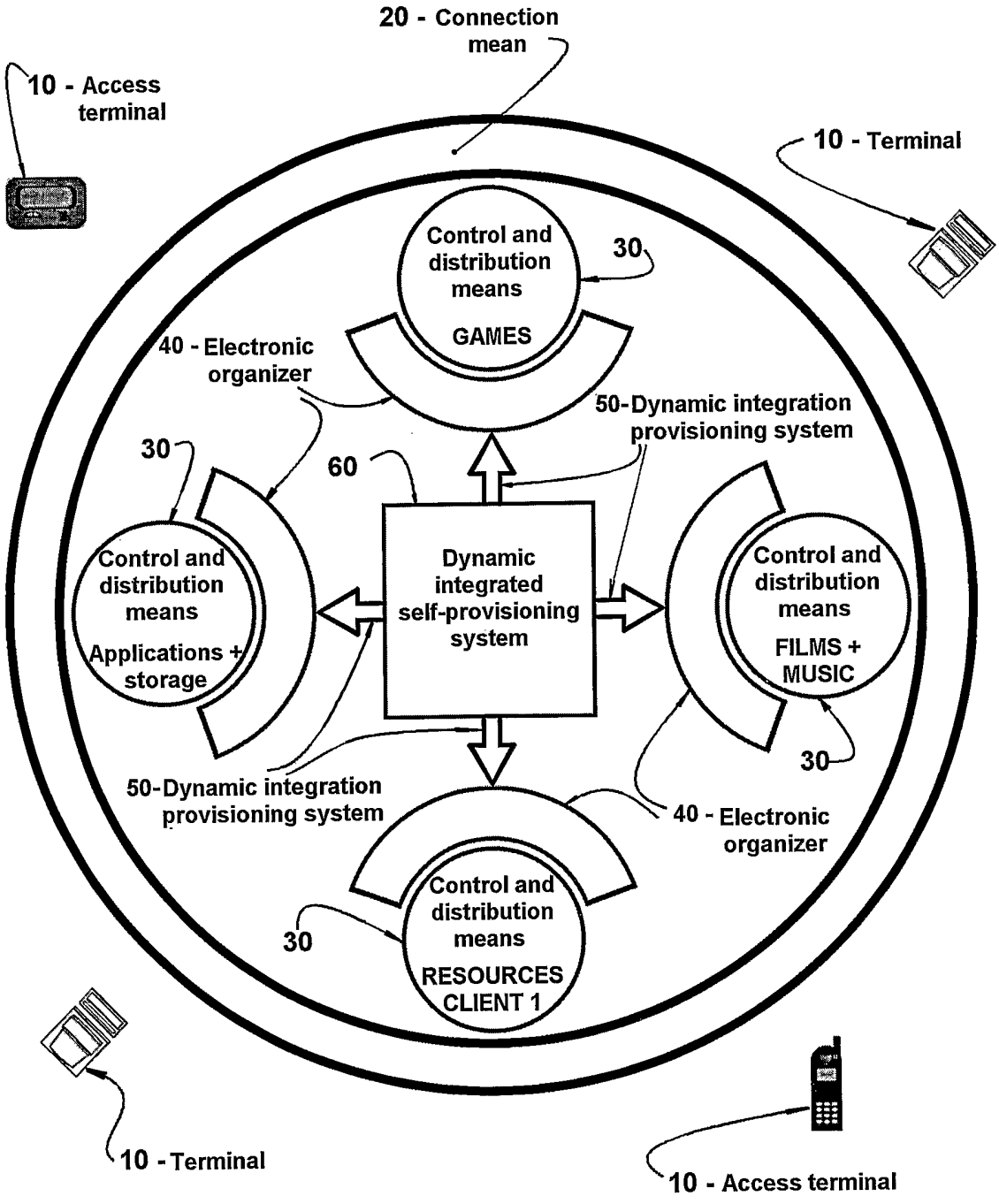
20 - Connection mean
10 - Access terminal
10 - Terminal
Control and distribution means
GAMES
30
40 - Electronic organizer
50-Dynamic integration provisioning system
30
60
Control and distribution means
Applications + storage
Dynamic integrated self-provisioning system
Control and distribution means
FILMS + MUSIC
30
50-Dynamic integration provisioning system
40 - Electronic organizer
Control and distribution means
RESOURCES CLIENT 1
30
10 - Terminal
10 - Access terminal

FIG. 1

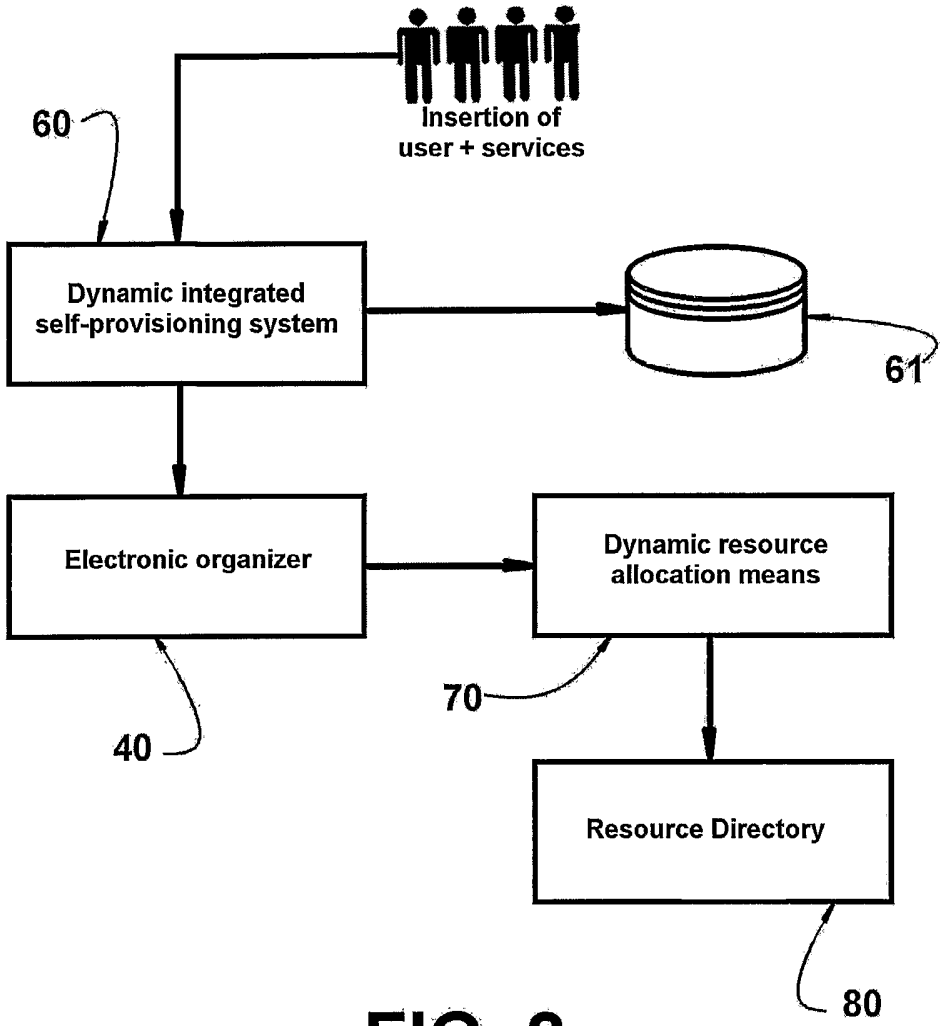
Insertion of
user + services
60
Dynamic integrated
self-provisioning system
61
Electronic organizer
Dynamic resource
allocation means
40
70
Resource Directory
80

FIG. 2

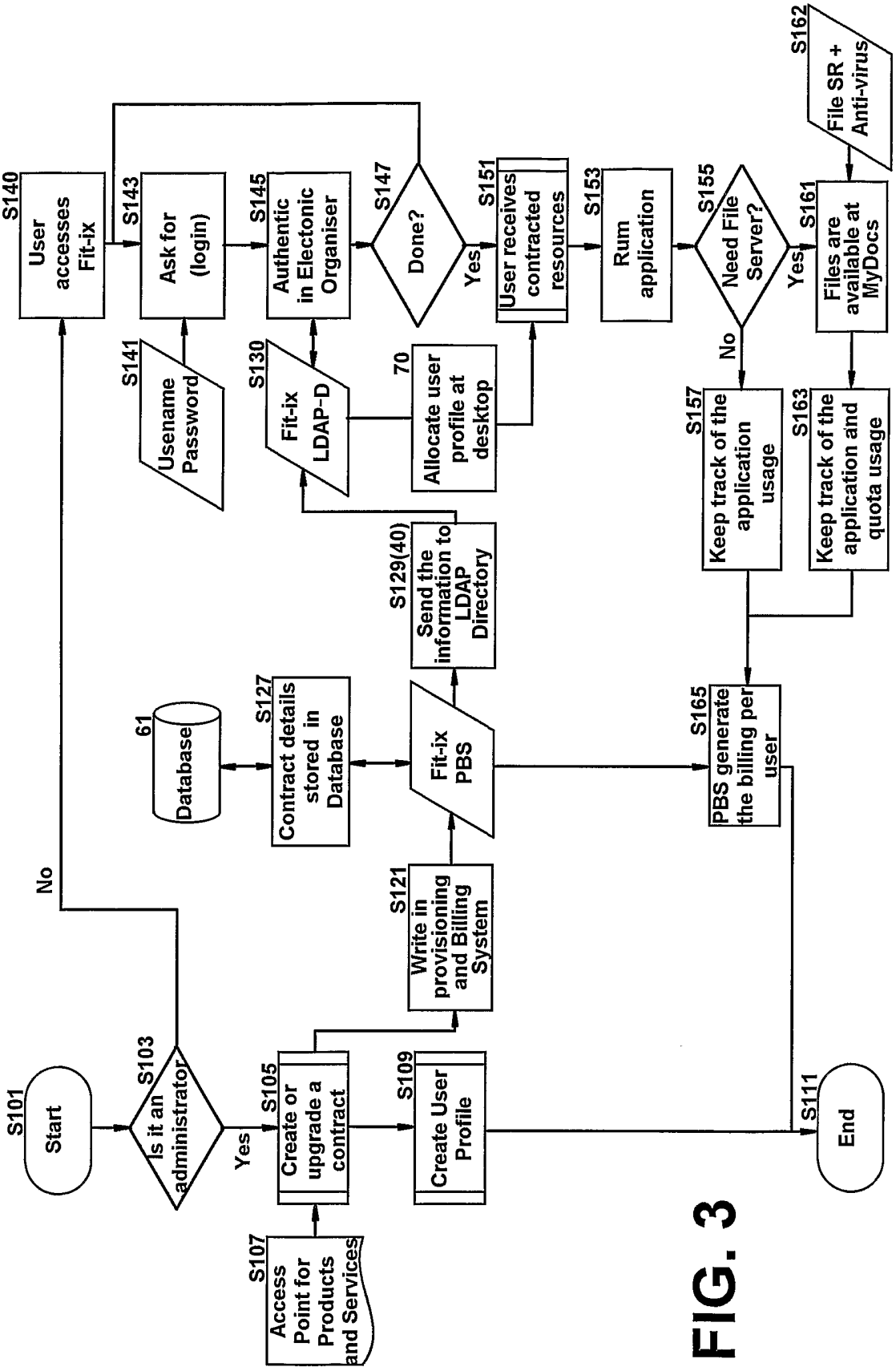
S101
Start
S103
Is it an administrator
Yes
No
S105
Create or upgrade a contract
S107
Access Point for Products and Services
S109
Create User Profile
S111
End
S121
Write in provisioning and Billing System
S127
Contract details stored in Database
61
Database
Fit-ix PBS
S129(40)
Send the information to LDAP Directory
S130
Fit-ix LDAP-D
70
Allocate user profile at desktop
S140
User accesses Fit-ix
S141
Usename Password
S143
Ask for (login)
S145
Authentic in Electonic Organiser
S147
Done?
Yes
S151
User receives contracted resources
S153
Rum application
S155
Need File Server?
Yes
No
S157
Keep track of the application usage
S161
Files are available at MyDocs
S162
File SR + Anti-virus
S163
Keep track of the application and quota usage
S165
PBS generate the billing per user

FIG. 3